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Some New Genera and Species of N. A. Tineina.

By W. G. DIETZ, M.D.

Believing that the genera and species here described are new to science, I offer the following as a small contribution to our knowledge of N. A. *Tincina*:

Eucordylea gen. n. fam. Gelechidæ.—Labial palpi strongly developed, robust; first joint porrect; second erect, with a dense brush of stiff hair the entire length of its upper surface, capable of being extended in a line with the first joint, and a lateral, fanlike spreading out of the brush; third joint shorter than the second, sharply pointed. Head about as wide as long, face perpendicular, smooth-scaled; occiput somewhat rough scaled. Eyes prominent, round; tongue wanting; no maxillary palpi; antennæ rather stout, simple, joints close set, scarcely more than twothirds the length of the anterior wings. Thorax and abdomen moderately slender. Posterior tibiæ with long, appressed stiff hair along their upper margin; middle pair of spurs at two-fifths from the apex, inner spur more than twice the length of outer one. Anterior wings elongate, dull pointed, nearly five times as long as wide, margins nearly straight from near the base to the apical fifth, then equally narrower from both margins to the apex. Neuration: costal to margin before the middle, cell closed, pointed posteriorly, vein 7 and 8 stemmed, 7 to costa. Hind wings rhomboidal, anterior and inner margins straight parallel, apex slightly

produced, posterior margin oblique, feebly bisinuate. A pencil of stiff hair arises between the insertion of the wing and the anal angle. Cilia twice the width of the wing. Neuration; cell closed; vein 2 arises remotely from hind angle of cell, veins 3-5 closely together from the latter.

While alive and at rest, the extended palpi, with its dense brush of stiff, bristly hair spread out laterally, give the insect a very peculiar, bearded appearance. The statements as to the neuration given above are such as are discernable without denudation; the single specimen in my possession does not warrant such proceedure. Careful examinations with high power fails to reveal the presence of a tongue.

E. atrupictella n. sp. (Plate I, fig. 1, 1a).—Pale creamy yellow. Palpi; outer surface of first joint, a transverse line about the middle and a broader band at the apex of the second joint and both of which extend across the brush of bristly hair; an annulus at the middle and another at the apex, not including the extreme tip of the third joint, blackish. Antennæ annulate with fuscous. Anterior wings with blackish markings as follows: extreme costa, from base to one-fifth its length, an oblique fascia beginning at one-fifth from the costa and reaching the dorsal margin at one-third, less distinct at the latter, bisinuate externally and shading off gradually to the ground color at the base; a broad and less oblique fascia before the middle, narrowed toward and not attaining the dorsal margin; bisinuate toward the base; a third fascia. narrower than the last, at a little less than two-thirds the length, slightly oblique, becoming narrower toward the dorsal margin without attaining it; this fascia is further removed from the base at its costal than at the dorsal extremity; a long stripe in the middle of the wing extends from the second fascia through the third and a trifle beyond; five larger and several very small and indistinct spots around the apex. Underside of wing, corresponding to the dark markings of the upper surface, but more diffused, dark fuscous. Cilia at apex dusted with dark fuscous scales. Hind wings pale cinereous, cilia concolorous, pale stramineous toward their base. Anterior legs annulate and spotted with dark fuscous; middle and posterior femora, with broad, irregular fuscous band before the apex, latter tipped with fuscous; middle tibiæ fuscous externally, posterior with a few scattered spots of fuscous scales, tarsi annulate with dark fuscous. Length of anterior wing 5.0 mm.; exp. 12.0 mm.; 0.48 inches.

Hab.—Hazleton, Pa. A single δ specimen taken August 4th, 1899.

Nealyda gen. n. fam. Elachistidæ.—Head transverse, moderately convex; face somewhat receding beneath; ocelli present; tongue strong

scaly at its base. Labial palpi of moderate length, curved, ascending rather remotely from the face, cylindrical, close scaled, apex not attaining the level of the antennal insertion, second joint somewhat thickened toward the apex, longer than the pointed, third joint. Maxillary palpi rudimentary. Eyes round, moderately convex, visible from the front. Antennæ slender, scarcely three-fourths the length of anterior wings, basal point very little wider than the stalk, less than twice as long as wide, the latter finely denticulate beneath. Thorax robust, convex. Abdomen rather short, in the male with small anal tuft and lateral claspers. Posterior tibiæ smooth, inner spur of middle pair twice the length of the outer and slightly thickened toward the apex. Anterior wings oblong lanceolate, costa evenly curved from the base. All veins present, cell narrow, nearly pointed posteriorly, closed, transverse vein very faint between veins 6 and the common stem of 7 and 8; costal attains costa at about two-fifths from the base, vein 2 arises closely to the short stem of 3 and 4, 5 approximates to 4; 7 and 8 long stemmed, 7 to costa; 7-11 attain the costal margin at approximately equal distance. 1b distinctly furcate at base. Cilia less than width of wing, scale-dusted. Hind wings three-fourths as wide as fore wings, outer margin deeply emarginate, causing the wing to become bifid; costal margin straight for two-fifths its length, thence feebly emarginate to the apex: dorsal margin straight from the distinct anal angle to the apex of lower apical cusp. Cilia nearly twice the width of the wing. Neuration; costal running close to the costa and nearly reaching the extreme apex, cell open between veins 4 and 5, closed between 5 and 7, by the margin of the emargination, 2 arises before the middle, 3 and 4 remote, 5 independently from near the base and forms the costal margin of the lower cusp; the anterior median reaches the deepest part of the emargination and forms the dorsal margin of the upper branch of the fork. 1b furcate at base.

The characters thus represented are so anamalous as to find no counterpart anywhere among the *Tincid* genera, as far as my knowledge goes, nor elsewhere among the Lepidoptera except the Pterophoridæ, to which the genus under consideration, however, bears no relationship. Its rather robust body, general habitus and palpi would perhaps place it near *Scythris* Hb. (*Butalis* Tr.).

N. bifidella n. sp. (Plate I, fig. 2, 2a, 2b).—Palpi fuscous, annulus at end of second joint and extreme apex of third, white. Antennæ pale brown. Head and thorax greyish, tinged with brown. For wings pale brown, tinged with golden; a dark brown fascia at two-fifths, equidistant from the base at its costal and dorsal extremity, sharply defined externally and edged by a line of silvery white; toward the base it passes

gradually into the ground color of the wing; extreme costa from base to fascia dark brown; a large costal patch of dark brown scales, beyond the middle, apical part and cilia densely dusted with nigro-fuscous scales, a subterminal line and extreme edge of latter, paler; before the darkly-dusted apical part of the wing is an indistinct, curved line of silvery scales, concave toward the base. Hind wings pale cinerous, cilia concolorous, pale stramineous toward the base. Abdomen pale fuscous. Anterior and middle legs dark fuscous, indistinctly spotted with pale, points of tarsi with a pale annulus; posterior legs paler. Length of fore wing 4.5 mm., 0.18 inch. Exp. 9.5 mm., 0.38 inch.

Hab.—Glenwood, Colo., August and September.

Varies somewhat in coloration of fore wings, ground color from a silvery grey to golden brown. In some specimens there is also a dorsal, less pronounced patch of brown scales, opposite the costal one. The pale line in apical part of wing is not evident in some specimens.

Pseudochelaria walsinghami n. sp. (Plate I, fig. 3a, 3b).—Palpi ashen grey, long, recurved, brush of second joint grooved, third joint longer than the second, pointed; outer side of first joint and base of second dark fuscous, brush dusted with fuscous, third joint with broad annulus above the base, rest dusted with fuscous scales. Antennaæ slender, dark brown above, faintly annulate with pale grey, paler on the underside, finely denticulate toward the apex. Head grey; thorax, abdomen and anterior wings ashen grey, with feeble purplish reflections; a dark brown triangular spot on the posterior end of the thorax. Anterior wings marked with a dark, rich brown, as follows: basal space limited externally by a sharply-defined oblique line, twice as far removed from the base at the dorsal than at the costal margin, but not including the latter and a narrow space of the adjacent surface; a longitudinal stripe, beginning at two-fifths and extending through the middle of wing to the apex, rather sharply defined along its dorsal margin, but becoming more or less diffused with the dark shading in the costal half; a whitish fascia at the beginning of the apical cilia, interrupted by the longitudinal stripe and passing gradually into the dark shading of the apical part of the wing; the costal part of the fascia is concave toward the apex, the dorsal part straight, and passes obliquely backward to the dorsal margin; apical part with dark lines radiating into the cilia. The median space is washed with brownish, having a slight golden reflection, becoming darker in the costal portion, and more so toward the apical fascia; in the dorsal half are two brown spots at two-fifths and three-fifths of wing respectively, the former surrounded by raised white scales. Cilia pale with two darker lines, basal line more distinct. Underside fuscous. Posterior wings pale fuscous, paler toward the base; cilia pale fuscous around the apex, a faint darker line at two-thirds, and another, still less distinct, subterminal one.

Underside fuscous toward the apex. Underside of body and legs pale ochreous, last ventral segment more or less fuscous; femora and tibiæ banded with fuscous, tarsi annulate with the same. Posterior tibiæ with stiff appressed hair on the upper side. Length of anterior wing 7.5 mm.; exp. 17.0 mm., 0.68 inch.

Hab.—Hazleton, Pa.

Larva pale green, with isolated hairs, lives under a white web on the under side of the leaflets, and also along the petioles of *Sumach* (*Rhus typhosa*), where it may be found from the latter part of August and during September. Pupa brown. The imago appears the latter part of May and early part of June the following year.

It gives me pleasure to dedicate this species to Lord Walsingham, who established the above genus and the type of which (*E. pennsylvanica* Wlsm.) is in my collection. The latter species differs from the above-described one in the wing markings, as may readily be seen by a comparison of the figures. It was taken at electric light. Larva not known. Plate I, fig. 4.

EXPLANATION OF PLATE I.

Fig. 1.—Anterior and posterior wing of Eucordylea atripictella. 1a, lateral view of head and labial palpus of same.

Fig. 2.—Anterior and posterior wing of Nealyda bifidella. 2a, neuration of anterior wing; 2b, neuration of posterior wing of same.

Fig. 3 — Pseudochelaria walsing hami. 3a, neuration of anterior wing; 3b, neuration of posterior wing of same.

Fig. 4.—Anterior wing of Pseudochelaria pennsylvanica Wlsm.

Notes on the Species of Crabro Found in the State of Washington.

By TREVOR KINCAID, University of Washington.

Thanks to the excellent monograph of the Crabroninae, published by Mr. William J. Fox, of the Academy of Natural Sciences of Philadelphia, it is possible for the American student of this group to readily determine such forms as he may discover.

During the last few years the writer has procured a considerable number of representatives of the genus *Crabro* from various parts of the State of Washington, and desires to place on